

The rejection for double patenting is in error in view of the restriction requirement in the parent application herein. A copy of the restriction requirement is enclosed for the convenience of the Examiner. Claims 1-5, 10-13, and 19-20, the claims pending in the present application, directed to expression vectors and cassettes as well as transformed cells, were placed in Group I; claims 6-9 and 29-30, drawn to methods of treatment, were placed in Group II. Applicants elected Group II for prosecution the parent. Although the restriction requirement refers to pharmaceutical compositions, the claims in Group I do not include any claims directed to pharmaceutical compositions. Accordingly, the Office has come to the conclusion that the present claims are a separate invention from those prosecuted in the parent.

III. The Art Rejections

Claims 1, 3-5, 10-13 and 19-20 were rejected as asserted anticipated by *Zambidis et al. J Cellular Biochem* (1993) Suppl. 17B. The abstract reports preliminary work of the present inventors describing only a specific exploratory vector. The claims have been amended to avoid anticipation by this document. Claim 31 and its dependent claims contain a limitation that the antigen be associated with autoimmune disease or allergic reactions of the animal. There is nothing in this document which describes a vector for a fusion immunoglobulin containing an epitope of an autoantigen or an allergen. Claim 41 and its dependent claims contain a limitation that the vector be a retroviral vector. The document cited does not disclose a retroviral vector, and former claim 2 was not included in this rejection. Claim 47 and its dependent claims require that the vector contain more than one copy of the nucleotide sequence encoding the epitope to which tolerance is to be generated. Again, there is no mention of multiple copy epitope-encoding nucleotide sequence in the cited document. Thus, *Zambidis et al.* cannot anticipate the presently pending claims as amended.

The parent application herein, issued as U.S. Patent No. 5,817,308 which claims pharmaceutical compositions and methods to confer immunotolerance, was found patentable over the cited publication because, as applicants pointed out in their response to similar rejection in the parent, the abstract did not provide any teachings of tolerance induction but only the invitation to experiment. It was the subsequent experiments performed and reported herein which led to the invention wherein a method of achieving tolerance could be described.

Applicants pointed out in the parent that the Zambidis reference does not teach how to use a fusion immunoglobulin molecule for induction and maintenance of tolerance. It merely makes such a method obvious to try and further does not provide a teaching of how to go about it.

Without access to this method, the expression vector claimed herein would have no utility and thus there would be no incentive to make it. As inherent anticipation has been avoided, the question becomes one of patentability under 35 U.S.C. § 103. This is not a viable basis for rejection since the cited document does not provide a reasonable expectation of success in using the claimed invention or any teaching of how to achieve it. Accordingly, the claims as presently drawn are not anticipated or made obvious by Zambidis.

The pending claims were rejected as obvious over the combination of the same Zambidis document with Zanetti *et al.* *Nature* (1992) 355:476-477 and Chambers *et al.* *Proc Natl Acad Sci USA* (1992) 89:1026-1030.

The addition of the Chambers document appears pertinent only to former claim 2 (present claims 33 and 41-46). Chambers is cited because retroviral vector transfection of lymphoid cells is said to be taught. The relevance of Zanetti as perceived by the Office is unclear, as no basis for its inclusion is stated. The only allusion to Zanetti in the rejection is "The expression of proteins in T-cells and PBLs as taught by Zanetti and Chambers *et al.* also indicates the transcriptional and translational control regions function in lymphoid cells as claimed." An explanation would be appreciated so a proper response can be made.

In any event, as stated above, the rejection of the broadest previously pending claims depends solely on the teaching of Zambidis *et al.* which document is inadequate to make the present claims obvious.

For the reasons stated above, the outstanding rejections may be withdrawn and passage of claims 31-51 to issue is respectfully requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 308072000110. However,

the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

By: Kate H. Murashige
Kate H. Murashige
Registration No. 29,959

Morrison & Foerster LLP
2000 Pennsylvania Avenue, N.W.
Washington, D.C. 20006-1888
Telephone: (202) 887-1533
Facsimile: (202) 887-0763